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10/008,106	11/09/2001	Paul A. Crawford	FMCC:014USR1	6485

7590 07/07/2003  
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EXAMINER

NICHOLSON, ERIC K

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 07/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/008,106

Applicant(s)

CRAWFORD, PAUL A.

Examiner

Eric K Nicholson

Art Unit

3679

-- Th MAILING DATE of this communication app ars on the cover sh t with the corr spondenc address--

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 11-09-01 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of the unnumbered “retainer ring” discussed in the remarks and shown as a separate element and positioned on the outer diameter of the tube. The changes made to the lead lines appear to be acceptable for approval however the examiner disagrees with applicant’s statement that “support for the amendment to FIG. 1 adding the retainer ring is found in the originally-filed FIG.1”, the examiner can find no such “retainer ring” in the figure nor does the specification support the addition of this “retainer ring”.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to

which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's prior art figures 1 and 2 in view of the Drawing labeled "CROSSOVER ASSY" listed in the form 1449 as "C2" and U.S. patent 5,350,205 to Aldridge et al.. The prior art figures 1 and 2 illustrate applicant's claimed invention with a pup joint having a length of pipe **12** having an outside diameter; an integrally formed female sub **16** connected to a first end of the length of pipe, the female sub **16** including a conical sealing surface **20**, an outer surface formed adjacent the conical sealing surface and external threads **22** formed on the outer surface; an integrally formed male sub **14** connected to the distal end of the length of pipe, the male sub **14** including a section having an outside diameter greater than the outside diameter of the length of pipe, the male sub also including a forward shoulder **32** extending radially outwardly there from and a spherical sealing surface **18** adjacent the forward shoulder which is adapted to mate with and seal against the conical sealing surface of another such pup joint; a nut **24** having an internal surface, internal threads **26** formed on the internal surface and a rearward shoulder **30** extending radially inwardly from the internal surface; one or more retainer segments **28** positioned between the rearward shoulder **30** of the nut and the

forward shoulder **32** of the male sub for restricting axial movement of the nut relative to the male sub in a first direction. According to prior art Fig. 2 in the specification the male sub can be threaded onto the distal end of the length of pipe, and the female sub can be threaded onto the first end of the length of pipe. The prior art figures 1 and 2 do not show a retainer ring in a groove nor a retention shoulder on the pipe length however, The drawing of reference "C2" labeled "**CROSSOVER ASSY**" illustrates and teaches a similar end connection to that of prior art figures 1 and 2 and makes it know that it is old and well known to use a retainer ring **5** positioned in a corresponding groove formed in the retainer segments **4** and which has an outer diameter which is greater than the diameter of the rearward shoulder to thereby maintain the nut **2** positioned around the retainer segments **4** and U.S. patent **5,350,205 to Aldridge** also illustrates and teaches a similar end connection to that of prior art figures 1 and 2 and shows also that it is old and well known to provide a retention shoulder **74** extending radially outwardly from the section of the male member the retention shoulder positioned rearward of the forward shoulder of the nut to restrict axial movement of the nut along the tube, see column 7, lines 4-9. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the retainer segments **28** of the prior art fittings of figures 1 and 2 with the groove and retainer

ring as taught by the drawing of reference "C2" labeled "**CROSSOVER ASSY**" for the purpose of keeping the nut on the retainer segments in order to keep the nut on the segments and thereby keep the segments together and on the length of pipe. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the length of pipe with a retention shoulder such as taught by shoulder 74 of U.S. patent 5,350,205 to Aldridge in order to limit the range of slidable movement of the coupling nut and retainer segments. See column 7, lines 4-9. As to claims 3,7 and 11 whether the shoulder is "machined" on to the pipe length or not is considered to be merely a process limitation and a comparison of the recited process with the prior art processes does NOT serve to resolve the issue concerning patentability of the product. In re Fessman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974). Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an ex parte case, product-by-process claims are not construed as being limited to the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976).

Applicant's remarks and arguments filed May 5, 2003 have been considered but are not deemed persuasive. Applicant argues the new matter rejection of the proposed correction to FIG. 1 stating that there is support because the "top half of the retainer ring is correctly shown in the version of FIG. 1 printed in U.S. Pat. No. 5,791,693" and further that the "same support also exists in originally-filed FIG. 1". The examiner agrees that the top half of the figures illustrates something that is not shown in the bottom half of the figure. The examiner however disagrees that there is support in the specification as filed to interpret what is shown in the top half of the figure to be a *separate ring* positioned between members 28 and 24. Without support in the specification the extra portion shown in the top half of the drawing could just as well be interpreted as an integral portion of the member 28 or the member 24 rather than a separate ring as applicant has now drawn. Further, as shown in the corrected figure it would be unclear how the "separate ring" could be viewed as a retainer ring as previously stated by applicant. The "separate ring" is not fitted in a groove as is the retainer ring is shown in the present invention of Fig. 4, the "separate ring" of the corrected drawing could not serve as a retainer ring as it appears that it would just slide off the member 28.

Applicant argues that the claims 1-12 are patentable over the cited references. First applicant argues that none of the references teach or suggest the

claimed retention shoulder and that Aldridge specifically does not disclose a retention shoulder extending radially outward from the male member/sub.

Applicant correctly states that “Aldridge discloses a snap ring 74 dimensioned to be snapped into the groove 38 in the outer circumference 32 of the flanged nipple col. 6, lines 53-55”. The examiner points out also that further on down in the same column in lines 58-53 that Aldridge states:

“The outside diameter of the snap ring 74 may also be greater than the diameter “e” of the aperture 50 through the coupling nut 40. Thus, **the snap ring 74 can function to limit the range of slidable movement** of both the thrust bearing 62 and the coupling nut 40 along the outer circumference 32 of the flanged bearing 14”

It is the above disclosure that allows the snap ring 74 to be viewed as a retention shoulder since the ring 74 clearly acts to control the sliding of the nut along the pipe just as the retention shoulder 142 does in the present invention.

Applicant appears to take issue that the snap ring does not extend radially outwardly from a male sub that is connected to that pipe section, attempting to draw a distinction between “a length of pipe” and “a male sub”. This issue fails for two reasons, first, “male sub” enjoys no special meaning to define it over a “length of pipe” and applicant provides no explanation as to how a “male sub” structurally defines over a “length of pipe”. Secondly, applicant is arguing the references separately and not in combination as the rejection of the claims was



made. As noted in the rejection it is the prior art figures 1 and 2 that illustrate the pup joint with Aldridge teaching a similar female nut 44 to connect the flange of the pipe just as the prior art figures teach nut 24 to connect the flange 18, with Aldridge disclosing the retaining shoulder 74 to keep the nut from sliding down the pipe as noted in col. 6, lines 60-63.

Applicant states that the “Office has not asserted that either prior art figures 1 or 2, or the cited page from reference C2 teaches the claimed retention shoulder” and therefore has not made out a *prima facie* case of obviousness. The examiner disagrees, clearly the Office has asserted that it is the combination of prior art figures 1 and 2 and the C2 reference teach the retention shoulder as is evidenced by the rejection of the claims 1-12 in the previous office action.

Applicant argues against the rejection of claims 9-12 stating with emphasis that claim 9 includes a male sub with “a section having an outside diameter greater than the outside diameter of the length of pipe” and that it further includes “a retention shoulder extending radially outward from the section of the male sub”. Applicant stating that “none of the cited references teaches or suggests the claimed retention shoulder. The examiner submits that the prior art figures 1 and 2 clearly illustrate and teach the a male sub with a section having an outside diameter greater than the outside diameter of the length of pipe, while the section is

unnumbered the end portion on which the nut 24 is positioned is clearly shown to have a diameter greater than the outside diameter than the length of pipe.

Applicant again appears to object that the snap ring does not extend radially outwardly from a male sub that is connected to that pipe section, attempting to draw a difference between “a length of pipe” and “a male sub”. As stated before, “male sub” enjoys no special meaning to define it over a “length of pipe” and applicant present or offers no explanation as to how a “male sub” structurally defines over a “length of pipe”. As to claims 3,8 and 11 applicant argues that the claims require the retention shoulder to be integral with the male sub. The examiner submits that this is more limiting than the claims themselves since they do not state that the retention shoulder is to be integral with the male sub, even so, the snap ring 74 of Aldridge can be considered to be integral since it has been held that the term “integral” is sufficiently broad to embrace constructions united by such means as fastening and welding. In re Hotte, 177 USPQ 326, 328 (CCPA 1973). The recitation that the retention shoulder is machined on to the pipe length is considered to be purely a process limitation and as noted above does not serve to resolve the issue concerning patentability of the product. the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Nicholson whose telephone number is (703) 308-0829. The examiner can normally be reached on Tuesdays thru Fridays from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone number for Technology Center 3600 is (703) 872-9326 for "before final" papers and (703) 872-9325 for "after final" papers.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703) 308-1113.

ekn  
7/1/03

  
**Eric K. Nicholson**  
**Primary Examiner**  
**Technology Center 3600**